

Patient Experiences in the Transition from Hospital to Home

DNP Final Project

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Nursing Practice in the
Graduate School of The Ohio State University

By

Oralea A. Pittman, MS, FNP-BC

Graduate Program in Nursing

The Ohio State University

2011

DNP Project Committee:

Elizabeth Barker PhD, RN, Advisor

Margaret Graham PhD, RN

Jodi Ford PhD, RN

Randall Longenecker, MD

Abstract

The purpose of this study was to describe patients' and caregivers' experiences with the transition from hospital to home.

A qualitative grounded theory approach was used for the study. Data were collected through unstructured interviews and through involvement in the discharge process at the hospital. The sample was drawn from adult patients and their home caregivers hospitalized on a family practice inpatient service at a rural hospital. Twelve patients and 9 family members were interviewed post-discharge in patient's or caregiver's homes and extended care facilities or other locations of their choice. Data analysis proceeded throughout data collection and after data collection was finished. Interviews were transcribed, reviewed, and coded for content related to the patient and caregiver's transition experiences.

Findings indicated that there were deficiencies in coordination of care, communication with patients and families around planning for discharge, and in the consistency of discharge teaching. Smooth transitions from hospital to home are complex processes requiring clear, accurate communication and coordination of activities by all care providers. Patient and family centeredness in the decisions about discharge is also imperative. Comprehensive discharge teaching is essential so that patients and families can manage anticipated and unanticipated symptoms after discharge.

Multiple programs are being tested nationwide to address these deficiencies. Future directions for research include evaluation of the outcomes produced by transitional care models.

Patient Experiences in the Transition from Hospital to Home

Chapter One: Nature of the Project

Introduction

Primary care providers are often first hand witnesses to the difficult issues faced by patients as they make the transition from hospital to home after admission for a chronic illness exacerbation or an acute illness. Issues faced by patients include a lack of continuity of care, deficiencies in patient and family-centeredness of the process, a complex health care system with multiple providers playing different roles in care, and increased vulnerability due to the stress of illness and hospitalization (Kripilani, et al., 2007; Naylor, et al., 2004; Rydeman & Tornkvist, 2009). The presence of multiple comorbid conditions only exacerbates the problem (Bixby & Naylor, 2009). The following case illustrates many of these issues.

The Case

WR is a patient in a family practice residency practice in the Midwest. The practice educates family physicians for rural practice. Each inpatient of the practice is cared for by a family practice resident supervised by an experienced family doctor who practices at the rural family practice and is a teacher in the residency program. As an outpatient, WR was followed by the nurse practitioner in the practice who did not provide inpatient care. On admission, WR's care was assumed by a family practice resident supervised by an experienced physician teacher from the family practice residency program.

WR, age 89, who has hypertension, hypercholesterolemia, and possibly mild dementia was admitted to the hospital through the emergency department for uncontrolled hypertension. She also had a remote history of a cerebrovascular accident, fractured hip, and hemi-colectomy for colon cancer. WR was widowed and lived alone in her own home with the assistance of her only son and his wife who lived nearby.

WR was hospitalized for 2 days; the cardiologist who was consulted changed all her anti-hypertensive therapy. She was on a multiple drug therapy regimen for hypertension and he changed her to a different multi-drug regimen. Her HTN was controlled in the hospital leading the primary care physician to believe WR was not taking her medications correctly at home.

WR was discharged at 6pm by a second year family practice resident who did not talk with her son at any time during the hospitalization. Prior to her admission, WR's son accompanied her to every office visit. WR's son's involvement in his mother's care was an example of WR's personal context that would not necessarily have been known by the second year family practice resident who assumed care in the hospital. WR's son was working on admission for his mother to an assisted living facility, but the details were not complete when suddenly WR called in the evening stating she had been discharged. WR's son took her home until the assisted living accommodations could be arranged. WR fell during her first night at home. WR was uninjured, but unable to get up by herself. She lay on the floor all night because she didn't want to push her Lifeline button and cause "trouble".

WR was seen in the office on the day following her fall. Her hypertension was uncontrolled again. She was on all new medications. There was no discharge summary, or cardiology consult report available. Fortunately she brought all her new and old medications to the office visit to be sorted out by her primary care nurse practitioner.

WR's son was dissatisfied with the way hospital discharge had been handled. The timing of the discharge and the lack of communication with him before discharge left him unable to complete arrangements for an increased level of care. The primary care nurse practitioner who had cared for WR for several years was unhappy because she wasn't informed of the hospitalization and outcome before seeing the patient and had no knowledge of WR's altered medication list. WR's fall and uncomfortable night might have been prevented if she had been discharged directly to an assisted living setting. The nurse practitioner's collaborating physician who served as the faculty physician during the

hospitalization and the family practice resident failed to notify the nurse practitioner of WR's exacerbation of hypertension and inpatient stay. Because of this, the nurse practitioner could not communicate to them about the close involvement of WR's son in her care and his report during their last visit that for the first time WR had requested his help in managing her medications. This had led him to believe that his mother could be having difficulties with her pharmacologic therapy.

Purpose

The purpose of the study was to describe the experience of the transition between hospital and home from multiple perspectives. These perspectives included that of the patient, the family or significant other caregiver, the primary care physicians who also cared for patients in the hospital, and other health care personnel including the discharge planners and nurses.

Using information from patient and family/significant other interviews and from participant observation of the physician inpatient team, nurses, and discharge planners, a grounded theory about patients' and caregivers' discharge experiences was developed.

Significance of the study to nursing and health care

Older adults with multiple comorbid conditions are particularly vulnerable to breakdowns in the coordination of care across transitions. This poor coordination of care results in poor outcomes, medication errors, unmet needs, and adverse events (Naylor, et al., 2009; Naylor and Sochalski, 2010). Excellent care for patients demands a smoother transition between inpatient and outpatient care.

Increased health care costs because of preventable readmissions can also be linked to deficiencies in coordination of care (Jencks, Williams, and Cole, 2009). One in 5 Medicare patients is readmitted to the hospital within 30 days and 50% of those readmitted did not have a primary care office visit before readmission (Jencks, et al.). Models such as the Transitional Care Model which uses advanced practice nurses to follow patients from the hospital to the home setting have shown up to \$5000 savings in health care costs per patient, mostly due to avoidance of preventable readmissions

(Naylor and Solchaski, 2010). Given limited resources to spend on health care, it is imperative that we understand the factors associated with breakdowns in coordination of care and communication so that they can be addressed.

Objectives

The objectives of this study were:

- To learn about the patient and family experience during the discharge transition from a rural hospital.
- To use this information to identify what elements were necessary for a smooth transition from the hospital to the home or extended care facility.

Chapter 2: Review of the Literature

Theoretical Framework

The theoretical model for the analysis of the problem of poor transitional continuity for patients was the Complex Adaptive Systems model (Olson & Eoyang, 2001, Chapter 1). A complex adaptive system is composed of many inter-related systems that continuously adapt to changes in the environment. This adaptation happens with many small and large changes to one or more of the interrelated systems that have an effect of producing change in other systems and throughout the system as a whole. Three important principles are assumed in complex adaptive systems. The first is that order is emergent rather than hierarchical. The second and third are that the organization's history is irreversible and the future is often unpredictable.

The building blocks of complex adaptive systems are the agents (Olson & Eoyang, 2001, Chapter 1). Agents are the individuals and groups who make up the interrelated systems of the organization and work in their own ways to accomplish the overall mission of the organization. Agents in this case include the primary care nurse practitioner, the faculty physicians, the family practice residents, the hospital discharge planners, and the patient and their family. Faculty physicians are practicing family practice physicians who are also the teachers of the family practice residents. Agents create patterns as they do their work. These patterns include ways of communicating, structure within departments, and resource use among other things. For example, the way that information about the hospitalization is communicated with the primary care office is a dysfunctional adaptive pattern. Discharge summaries are conducted only on patients who were hospitalized for at least 3 days (L. Sorg, personal communication) and required by the Joint Commission to be completed within 30 days post-discharge. However, this pattern doesn't contribute to timely communication with the primary care office (Kripalani et al., 2007). By 30 days post-discharge, most patients have already been seen by the primary care provider for a hospital follow-up visit. Patterns are evolving as changes occur both within and

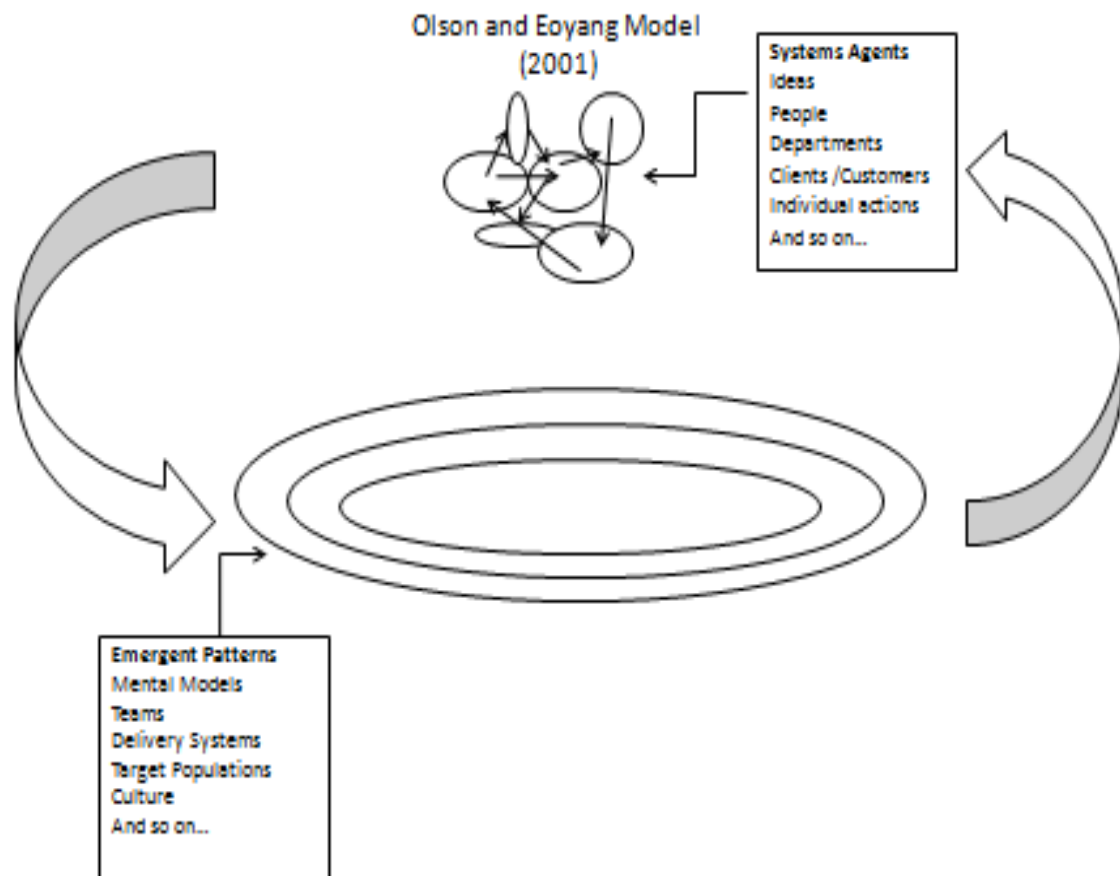
outside the organization (Olson and Eoyang, 2001, Chapter 1). Changes in one agent's patterns may lead to changes in other patterns. Patterns are positive in that they can provide tried and true ways of getting some things done while freeing up creativity and energy to work at forming new adaptive patterns in other areas. Patterns can be negative if too much dependence on them locks agents into habits that are not adaptive to changes inside and outside the organization. Patterns can also be negatively affected if agents are arbitrarily isolated from one another.

Self-organization is the way these patterns emerge and change over time to adapt (Olson & Eoyang, 2001, Chapter 1). Research into self-organizing systems has shown that what shapes self-organization can be divided into three factors (Olson & Eoyang, 2001, Chapter 1). The three factors are containers, significant differences, and transforming exchanges. The container is the boundary for the self-organizing system. This can be a department, a geographical location, or a conceptual boundary. Several containers may exist in the larger organization. These containers have semi-permeable boundaries because complex adaptive systems are open systems. Containers are cohesive forces that hold the parts together so that self-organization may occur. Significant differences between agents are the second factor which shapes self-organization. Significant differences include but are not limited to power, gender, levels of expertise, education levels, and perceptions of the agents and the organization's mission. One example of this in the case discussed previously is the differences in the perspective the second year resident and the nurse practitioner had of the patient and the patient's context formed in part by drawing on their areas of expertise. The third factor which shapes self-organization is transforming exchanges (Olson and Eoyang, 2001, Chapter 1). Transforming exchanges form the connections between agents. Information, money, energy, or other resources are the media of transforming exchanges. As these resources flow from agent to agent, each is transformed in some way. The conversations that take place around the significant differences are in themselves transforming exchanges and may lead to organization change.

For example, after the nurse practitioner discussed the problems which came about as the result of the patient's early discharge without family consultation, the resident was at first dismayed that her care of the patient had contributed to these problems. She took it upon herself to regularly update the nurse practitioner on hospitalized patients. The conversation back at the time the problem occurred was a transforming exchange for both agents. The nurse practitioner became conscious of the information gaps in the transitions between care settings and began to analyze them. The resident made a small individual change that moved the practice toward closing part of the gap. The nurse practitioner and the resident changed one small part of the organizational pattern and self-organized their pattern around patient transitions in a different way. In this way, they both became change agents in the complex adaptive system. This corresponds as well with the comments by Batalden and Foster (2004) who state in their essay that any change program will do if it fosters improved situational awareness and close attention to what is actually happening.

Change agents in a complex adaptive system look at the three factors which shape self-organization, (containers, significant differences and transforming exchanges) and then analyze how a change can be made in any of them to change the self-organizing path to better adapt to internal and external conditions and better satisfy the organization's mission (Olson & Eoyang, 2001, Chapter 1). The change agent looks at current patterns, makes a change in one or more of the factors, and observes the changes that ripple throughout the system. Another change is then contemplated to change the pattern further in a way that moves the organization toward adaptation to its environment.

In their model of organizational change, Olson and Eoyang (Chapter 1, 2001), depict the elements of organizational change as interconnected system agents who can affect the pattern of the organization which can then affect the system agents again. They use the metaphor of ripples to depict the changing pattern.



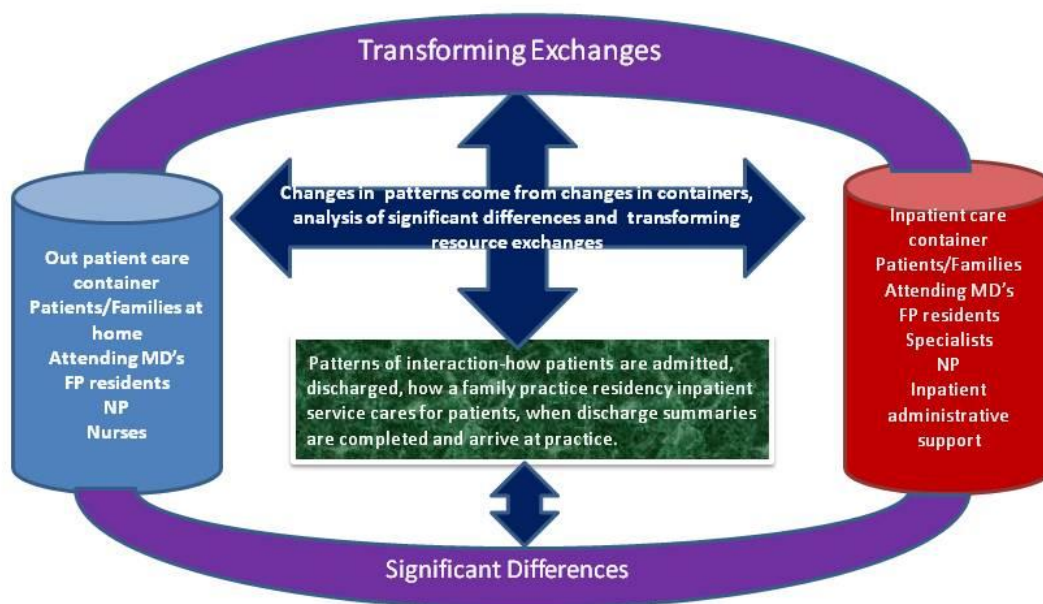
In the following model, Olson and Eoyang's (2001) metaphor of containers is used to represent both the geographic and conceptual inpatient and outpatient practices that make up a family practice residency with both inpatient and outpatient services. The metaphor of containers fits this situation because in this situation, transitions between containers or systems are the issue. Within both systems are numerous agents who impact the care of patients in transition between the two systems. There are significant differences in the processes and focus within each system. Transforming exchanges between the agents involved in both inpatient and outpatient care could change the patterns in ways that would be more adaptive to the situation of both patients and health care providers. One way to increase

transforming exchanges is to increase the links between the inpatient and outpatient setting and to include the patient's home or post hospital placement as part of the outpatient system.

Complex Adaptive System Model Applied to the Patient Transition Problem

Adapted from Olson & Eoyang (2001)

Complex Adaptive Systems Model



Related Research

In a review of the literature, preventable poor outcomes were commonly present in the transitions of older adults from hospital to home (Naylor et al., 2004). Problems included individual patient factors like multiple co-morbidities. System factors, such as poor communication between healthcare agencies and inadequate education of patients and caregivers also were found to contribute to poor patient health outcomes. According to the findings, one third of all patients and caregivers reported major unmet needs and high levels of dissatisfaction.

In another review of discharge management using the Assessing Care of Vulnerable Elders (ACOVE) Quality Indicators, the authors found that hospital discharge summaries do not reach primary care providers reliably (Wenger & Young, 2007). They also noted that primary care providers were not being notified when vulnerable elders were admitted through the emergency department. Forty-six to seventy one percent of adults, not just vulnerable elders, fail to follow up with their primary care provider after an emergency room visit. Providers can intervene with telephone follow-up, but only if they are aware of the emergency room visit. Wenger and Young (2007) also pointed out the problem with medication follow-up in their review. Often during a hospitalization, new medications are initiated and others are discontinued. One week post discharge, 72% of older patients were incorrectly taking at least one of their new medications and 32% of medications were not being taken at all. In some studies, medication communication to a primary care provider resulted in fewer readmissions, better medication adherence, and more appropriate medication regimens (Wenger & Young, 2007). It certainly is easier to intervene in common medication issues when the primary care provider following the patient in the outpatient setting is aware of the medication plan.

One part of the problem is the quality and timeliness of written communication during transitions or hand-offs between care providers in the inpatient and outpatient settings. The Joint Commission on Accreditation of Healthcare Organizations requires that discharge summaries be completed within 30 days of hospital discharge. Kripalani, et al. (2007) found in their review of transitional communication that most patients, 66-88%, are seen for their first post-hospitalization visit before the discharge summary reaches the primary care practice. Twenty-five percent of discharge summaries are never received. Twenty-four percent of primary care providers reported that their post-hospitalization management was adversely affected by delayed or incomplete discharge communications (Kripalani, et al., 2007). Among an intervention model proposed to increase the

success of patient hand-offs between the inpatient and outpatient setting, 4 out of 12 recommendations addressed the flow of communication (Greenwald, Denham, & Jack, 2007).

Continuity of care was an essential predictor of elder and family caregiver satisfaction in a study of 134 patient/family caregiver dyads examined two weeks after discharge (Bull, Hansen, & Gross, 2000). Caregivers who perceived better coordination of care felt more prepared to assist their family member. Continuity of care in this study was defined as continuity of information among hospital, patient, family, and community care providers involved. This definition could also fit the concept of coordination of care.

Discharge planning can make the transitions between hospital and home easier or it may lack patient and family-centeredness. In a review of best practices, Bauer, Fitzgerald, Haesler, & Manfrin (2009) discovered that discharge planning that met the needs of frail elderly patients and their family caregivers included a thorough assessment of the specific environmental and social needs of the patient and family, adequate information and discharge education, and family assistance with access to ongoing support from community services. Patients and families also should be included in discharge planning from the beginning and clear and effective communication between the family and the multidisciplinary group of health care providers is needed. The review included literature from the 1990's and 2000's and the same needs were found in both decades, thus, they have not been thoroughly addressed.

One of the requirements in the review on patient and caregiver needs was the need for adequate discharge information (Bauer, et al., 2009). In a review of opportunities to improve medication management in home care, it was noted that patients and family caregivers suddenly go from having medications entirely managed by the inpatient nurses to having to manage medications on their own (Foust, Naylor, Boling, & Cappuzzo, 2005). This shift in who is responsible for medications comes at a time when families and patients are often tired and stressed. Thorough discharge teaching about medications, their purposes, changes from before hospital admission, and their schedules is

essential to avoid adverse events. Nurses, however, often report barriers to effective teaching such as a lack of time, late prescription writing by physicians, and a lack of awareness of discharge plans (Bauer, et al).

Medications are only one area of discharge education that needs to be completed. In another study of patients near discharge, less than 50% could name their diagnoses (Makaryus and Friedman, 2005). Even less could name their medications and purposes, although more knew the purpose of the medication than the name. Patients going home after abdominal surgery expressed needs for education about pain management, wound care, nutrition, activities of daily living, and what to do if complications arose (Williams, 2007). Only 58% were satisfied with the information received and 21% were dissatisfied. Also concerning was patients' reports that only 23% were consulted about what information they thought they might need for care at home.

The lack of assessment of patient information needs is especially disturbing in light of the findings of a study of cardiology patients. This study found a disconnect between patients' satisfaction with the information they received at discharge and the discharge preparation that nurses perceived they needed (Burney, Purden, & McVey, 2002). Patient satisfaction with the education received was poor particularly in respect to lifestyle changes and symptom management. Nurses in this study focused more of their preparation for discharge on making sure the patient was functionally able to go home and linking patients with community resources. Although these activities are also important, they were not meeting the patients' needs for information.

The problem of poor coordination of care through transitions, problems with communication with patients and families, and issues with discharge education are clear. What interventions will improve continuity, coordination, communication and education across settings is less clear. Nurses have been involved in multiple interventions, especially in enhanced discharge planning and intervention, but the results are mixed. Few studies clearly demonstrate that continuity increases

quality of care (van Servellen, Fongwa, & Mockus D'Errico, 2006). In a review of post-hospitalization nursing interventions for patients with congestive heart failure, some interventions seemed to result in lower re-admission rates and higher quality of life scores, but few documented lower costs (Hamner, 2005). Nurse practitioners were involved in some of the successful interventions (Hamner, 2005; Naylor et al., 2004) thus, Hamner (2005) concluded that nurses intervening post-hospitalization with heart failure patients should have advanced education.

In addition to the roles that acute care nurse practitioners play in the hospital setting, primary care nurse practitioners also work in acute care inpatient settings and with patient transitions. For example, at the Medical Center at the University of California, San Francisco, adult and family nurse practitioners developed a collaborative role with attending physicians and residents to care for a general medical population (Howie & Erickson, 2002). The goals of the nurse practitioners were to provide excellent patient-centered care. To meet these goals the nurse practitioners initiated contact with the patient's primary care providers so that outpatient care issues could be integrated with the inpatient issues during the hospitalization. Because of their nursing background, they provided an expanded focus beyond the medical diagnosis and management that included other issues of patients and families that may influence the recovery. The nurse practitioners were also more familiar with community resources. Unfortunately, the report ended with the role description and there was no exploration of outcomes of the program.

In one randomized controlled trial findings illustrated the possible roles nurse practitioners could play in inpatient care and transitions from home to hospital. In the study, Naylor, et al. (2004) examined transitional care of patients with CHF where nurse practitioners collaborated on the patient's care during hospitalization and for 3 months following hospitalization as part of her work studying the Transitional Care Model. The intervention included daily visits during the hospitalization beginning within 24 hours of admission and extended post-hospitalization with telephone availability of the nurse

practitioners and home visits. They also attended the patient's first visit with their physician after discharge. The NP's collaborated with physicians during the hospitalization and subsequent follow-up, utilizing national guidelines regarding CHF care. During the next year, the intervention group was readmitted less frequently and spent less days in the hospital. Their costs for health care were less and they reported greater overall quality of life and satisfaction with care.

Chapter 3: Methods

Research Design

In a review by Naylor in 2004, one third of all patients and caregivers reported major unmet needs and high levels of dissatisfaction after hospital discharge. Anecdotal observations and feedback indicated that patients discharged from a rural Midwestern hospital also experienced dissatisfaction with their care in the transition between hospital and home. No systematic exploration, however, of the patient experience during this major transition has been done. Therefore, this study sought to document the patient and their family/significant other's experiences of this transition. Once the experience had been described from the perspectives of patients and care providers, data analysis allowed development of a grounded theory about this transition from hospital to home. A grounded theory could guide future interventions to improve the hospital discharge transition (Glaser and Strauss, 1965, 1968; Hutchinson, 1983; Mullen, 1978; Wilson, 1982 as cited in Hutchinson, 1986).

Through participation in the inpatient and discharge experience of patients, the researcher gained understanding of multiple perspective of the process. A grounded theory approach was chosen because grounded theory methods use a from-the-ground-up approach of observing everyday behaviors and organizational patterns to generate theory about how people make sense of their environment (Hutchinson, 1986). Important to grounded theory is the assumption that people sharing common circumstances such as patients, family, and health care providers moving through the discharge process share meanings and behaviors. Another assumption is that some of the meanings and behaviors may constitute an unarticulated problem which is resolved by people in the situation using social psychological processes. Uncovering and understanding the problem and its resolution from different perspectives is an important part of developing grounded theory.

As noted in the adaptation of the Complex Adaptive Systems Model, the experience of hospitalization and discharge to home or another care setting is complex (Olson & Eoyang, 2001,

Chapter 1). Multiple professional caregivers, patients, family members, and institutions may be involved. When professional caregivers assume that the interactions around a patient's discharge and home care instructions are linear and straightforward, those assumptions fail to account for issues such as the patient's context at home, patient and caregiver health literacy, and the anxieties of being discharged when the patient and caregiver may believe the patient to still be quite ill. According to the CAS model, a description from patients and their caregivers about their lived experience of hospital discharge will assist health care providers in improving their care during this transition from hospital to home or other transitional care setting.

Sample

The sample for this study was composed of patients from a rural family practice that also included a rural family practice residency. The practice was owned by a rural 100 bed hospital in the Midwest where inpatient care occurred for patients of the family practice. The practice included four family practice physician faculty, one family nurse practitioner, and up to six family practice residents in their first, second, or third year of residency. Historically, the family nurse practitioner was the only provider from the practice who had not participated in inpatient care. None of the providers cared for patients full time in the outpatient practice due to their teaching, learning, and administrative responsibilities.

There are approximately 2400 patients in the practice. These patients generate about 10,000 office visits per year. During the autumn of 2009, 153 hospitalizations occurred excluding obstetrical and newborn admissions. One hundred thirty of those hospitalized were over the age of 20 years and 65 of them were over 61 years of age. Sixty-eight percent of the patients hospitalized were female, 32% were male. Nearly all of the patients hospitalized for non-obstetrical hospitalizations were Caucasian. Although Amish patients are not uncommon in the obstetrical part of the family practice, they are a small percent of patients hospitalized for other diagnoses.

The sample for this study was drawn from the patients hospitalized from January 2011-March 2011. Obstetrical patients and newborns were omitted from the study because the family nurse practitioner at the practice does not participate in prenatal care. Children and adolescents were also omitted from the study since their hospitalizations at the rural hospital tend to be very brief for acute self-limited problems which do not require the same attention to transitions as the exacerbations of chronic conditions for which adults are commonly hospitalized.

Adult patients 21 or older and their home caregivers, as appropriate, were interviewed about their experience of the transition from hospital to home within one to three weeks after hospital discharge. Patients and caregivers were interviewed separately or jointly according to patient and caregiver preference. Institutional review board approval was obtained from the rural hospital and The Ohio State University Behavioral and Social Sciences Institutional Review Boards prior to conducting patient interviews.

Patients and their caregivers were recruited to participate in the study based on their admission to the inpatient service of the family practice during the time the study was ongoing. Participants in this study all had experienced hospitalization at the rural hospital and discharge to home as either a patient or the home caregiver of a patient participant.

All patients hospitalized at the rural hospital by the family practice during the preceding year in the age groups being studied spoke English. Occasionally, the practice does care for some young families who speak Spanish, but that is primarily in the obstetrical practice. In order to assure meaningful interview data, patients with cognitive impairment and severe physical discomfort that would preclude participation in an interview were excluded from the sample. Twelve patients and nine caregivers were interviewed.

Methods

Recruitment, informed consent, and data collection procedures.

Patients and their home caregivers who met the criteria described above were informed about the study by the nurse practitioner during their hospitalization or by telephone after discharge. Patients who agreed to meet after their discharge were called to schedule a visit as soon as was practical. Informed consent for the interview and for a chart review was obtained at the time of the interview. Of the 28 patients and family members contacted to participate in the study, 21 were interviewed, three could not be reached after hospital discharge, and 4 declined to participate when called for an appointment. All interviews were conducted by the researcher.

Barriers to recruitment and data collection.

The interviews were scheduled as soon as possible after the hospitalization to enhance participant's recall of the hospitalization and discharge experiences. However, the lag time due to the schedules of patients, caregivers, and the interviewer as well as the stresses of the hospitalization and post-discharge care may have affected the patient's and caregiver's memories of the experience. The time between discharge and interviews varied from 1-3 weeks.

Instruments

Data collection.

Data were collected through unstructured interviews conducted in patient's and/or caregiver's homes or at the extended care facility and through observation of the hospital experience of patients, families, and health care providers. Demographic data including age, hospital diagnoses, number of days of hospitalization, and post-discharge care site were documented for each patient through interview and record review. See Appendix A. Each interview began with some short answer questions. An interview guide was developed to elicit perceptions about the discharge planning and conversations with their health care provider and others involved in their care. See Appendix B. The patient and

caregiver were also asked to describe their perception of their readiness for discharge and their knowledge level about their post-discharge care.

Hesse-Biber and Leavy (Chapter 4, 2006) describe an in-depth interview with several phrases that captured the essence of the type of interview planned. They noted that the in depth interview is a meaning-making partnership and a knowledge producing conversation. They also noted that the in-depth interview acknowledges the interviewee as the expert in their experience. During the in-depth interviews with patients and caregivers which were done for this study, the researcher wanted to learn about patient and caregiver experiences during the transition from hospital to home. Interview questions were designed to facilitate the patient and caregiver sharing their experiences in their own words. Questions were used only to help keep the conversation moving, to clarify information, and to focus the conversation if it strayed from the purpose.

Another part of data collection was the field observation. The researcher participated in and observed the care of hospitalized patients by attending rounds and working with the physicians to learn more about inpatient care. Field notes of these experiences were kept.

Data quality procedures.

One characteristic for assessing the quality of qualitative data is transferability (Stommel and Wills, 2004, Chapter 18). Transferability was addressed by providing thick descriptions of the study participants and their caregivers. These included demographic data such as age, gender, household makeup, presence of caregiver in the home, discharge diagnoses, and number of medications. In addition to demographic data, detailed records of the patient experience were captured by audio recording interviews. All patients agreed to have their interview recorded. By interviewing the patient and their caregiver, some triangulation was achieved in documenting the patient's hospital discharge transition experience.

Data interpretation/analysis.

After the interviews, the audio recording was transcribed verbatim and the data reviewed by the researcher. Data analysis is an ongoing process in qualitative research that begins with the first data collected and continues through the data collection process and beyond (Hesse-Biber & Leavy, 2006, Chapter 10). For this study, the nurse practitioner made field notes after each interview and also on the experience of observation in the hospital setting.

Data from interviews and observation were coded and themes were identified. Although an initial literature review was done to help define the role of the nurse practitioner in improving transitions between care settings and to explore problems of discharge transitions, that information was bracketed during the data gathering. Bracketing this data allowed the nurse practitioner researcher to focus on the data gathered in the particular context of a rural family practice residency and their patient discharge experiences and processes. Additional literature review to support the emergent theory was done after data collection and analysis (Hutchinson, 1986).

The nurse practitioner researcher also bracketed the personal preconceptions, values, and beliefs brought to the data gathering experience (Hutchinson, 1986). This was necessary to understand the world from the point of view of another.

Chapter 4: Findings

Results

The main theme that emerged from the patient interviews was a lack of coordination of care through the transition from hospital to home. Two subthemes emerged which impacted the coordination of care. The first subtheme involved the decision about the timing of discharge and the way in which that decision was communicated to the patient and family. The second subtheme that emerged detailed the deficiencies in discharge teaching which were present in many patient stories. Each of the themes will be discussed in more detail below.

Coordination of care.

This study focused on the discharge transition from hospital to home or extended care facility. Given the short duration of most of the patients' hospitalizations, it can certainly be argued that there are processes occurring throughout the patient's whole hospitalization that also impact this transition. However, for the purposes of this study, only experiences connected with discharge processes were included in the final data analysis.

Coordination of care across settings is difficult to achieve given the numbers of different health care providers who are involved in the care of patients, especially those with multiple co-morbidities. Patients were cared for in the hospital by a resident and teaching family physician who sometimes did not know them well. Different doctors from the primary care practice were involved on different days of the week. Many patients interviewed also had specialists such as cardiology, surgery, or orthopedics either consulted or co-managing their care. Multiple hospital service providers were involved in the discharge process, such as nurses, discharge planners, and diabetes educators. Home medical equipment providers, primarily for oxygen were part of the care of some patients. Home health agencies or extended care facilities participated in the transition from hospital to home for many of the patients interviewed. Coordination between these multiple providers and patients and families required

effort and planning. Patients and families gave multiple examples of where they perceived coordination of care to fail. Quotes from patients have been edited only for clarity. One patient's son in discussing his mother's transition from the hospital to an extended care facility after a hip fracture said:

I guess I would probably have your nurse or whoever is overseeing her at that time, probably walk her through that, pretty much hand to hand. Especially the last day.... Just to have someone be a little more attentive to the fact that she is leaving and letting you know they are there caring and doing for them.

Another patient described the difficulty of obtaining a follow-up appointment with her primary care provider. She especially felt this was a problem when she was sent home from another hospital before her condition improved and told to follow-up the next business day with her primary care provider.

They give you a thing that says follow-up with your primary care doctor. To me that is - I don't feel like calling anybody. You are putting this on me. Like I said, [primary care provider] is busy. She can... get to you in maybe two weeks.

Another patient remembered that her primary care provider seemed to feel strongly that extended care facility placement might help her rehabilitation from knee surgery. Her care, however, was being managed by the orthopedic surgeon. No one but the primary care provider ever discussed extended care facility rehabilitation and so the topic was dropped. She went home with a home health referral for physical therapy. She noted, "No one talked with me about where I wanted to go - like they did when mother was in there."

Decision-making about the discharge transition.

One of the subthemes had to do with how physicians, patients, families, and other medical personnel are involved in the decision of when to send the patient home. Only one patient could identify a discussion with the physician where progress to be accomplished before discharge and the likely date of discharge were clearly explained. All patients were asked the same question "How did

your doctor discuss your discharge with you?” Following are some of the responses: One patient stated-“I am not really sure. You always wonder whose decision was this? I am not sure who made the final decisions. The doctors came in every morning...They just kind of set a date.” This patient asked to stay another day for physical therapy on a Saturday before discharge to an extended care facility following repair of a hip fracture and her request was granted. Another patient stated “They [the nurse] just came in and told me I could go,” while another described her experience with the discussion about discharge below:

It was on the weekend, I believe. There were different doctors there. No one really said when [I could go home]. When I [asked, they said] maybe tomorrow. And then tomorrow came and nothing much was said. When the next day came and they said - this was early in the morning when they were there, they said possibly this afternoon I could go home.

Whether family members or significant others had the opportunity to be involved in the discussion of discharge plans was also important to families, but did not happen consistently. The niece of an elderly patient hospitalized for atrial fibrillation described her experience this way.

The communication from the doctors themselves was not so great because we did not know when to catch them. With [alternating on call cardiologists] it was a little confusing. We were fortunate to catch [patient’s cardiologist] once. ...It is a little confusing. The last time she was in there it was confusing. It would have been better [for] her and us if that [discharge plans] would have been discussed with [PCP] instead of somebody that did not know what was going on. [Resident] was good the last time - I thought maybe we would see her. We did not see her either.

Patients and families also experienced problems with the actual discharge process once the decision was made. Although the process seemed to move steadily forward for some patients, others

experienced long waits for pieces of the process to come together. One patient experienced a long wait for the home oxygen provider to arrive, only to find out that the oxygen provider had been waiting for a call from the nurse, which had not been made.

The nurse then comes back in and said the oxygen guy is here. Just a minute I have to write all of this out. "Write all of what out?" She was gone for a while and came back and had all of this stuff written out [medications which were not changed during hospitalization].

Other patients experienced issues with misunderstandings about discharge medications which seemed to take a long time to clarify with the primary care provider's office.

Patients who were transferred to extended care facilities for further rehabilitation also experienced some confusion in the process. One patient and family reported difficulties in obtaining medication when the patient was admitted to the extended care facility. Knowing this had been a problem when the patient was admitted to the same extended care facility in the past, the patient and family attempted to be proactive and get the extended care facility to order the medications from its pharmacy in another city before the patient was discharged to the extended care facility. The facility, the patient said, stated they could not order the medications until the patient arrived in the facility, but promised to expedite the order once the patient arrived. This resulted in the patient not receiving pain medication for 10 hours, from the time she left the hospital in the late morning until late evening. She was 4 days post-op from a hip fracture repair.

Another family member expressed dismay when on the way to pick the patient up at the hospital, she was told the patient would be transported to the extended care facility by ambulance. When she questioned this, she was told the primary care provider had ordered the transfer to occur in this way. She felt this was possibly an unnecessary expense for the patient, but had no opportunity to

be part of the decision. In exploring this topic further with the discharge planners at the hospital, there was no policy at either the extended care facility or the hospital which required ambulance transfer.

Consistency in discharge teaching.

The other major subtheme in the transitional coordination of care between hospital and home was the lack of consistent discharge teaching. Teaching that occurred was limited, often only covering medications. One family member whose patient was going home on two new acute medications to treat pneumonia said,

She [the nurse] just came in, "You have to sign this paper and this paper. Here are your two prescriptions." She didn't even really explain the medications...like when to take it. I don't recall her doing that. She just said here are your prescriptions. I guess I should have questioned that - when does she take this?

The patient also did not remember any medication teaching done before her family arrived. Patients in some cases did report receiving some written information on new medications, but without further explanation or reinforcement or assessment of understanding. All patients discharged to extended care facilities reported they received no discharge teaching at all. This certainly could hamper their abilities to make sure they were receiving the correct medications in the extended care facility. Another patient knew her medications, but was unclear on why some changes were made. She was also confused about the purpose of some of her medications. One family member who manages her mother's medications did feel the discharge teaching had been thorough and was able to describe clearly the changes made in her mother's regimen.

Beyond medications, patients gave multiple examples of how the lack of discharge teaching affected their transition from hospital to home. Two patients gave especially vivid accounts. One patient following partial knee replacement described that she had not been told what to expect when she returned home.

I remembered about the oxygen and how important it was. I remembered about - watching my incision to watch for seepage. I was scared to look down there. ...[The patient felt she received no assessment or teaching on the following topics] When people get home, where is your toilet? How are you going to maneuver around the toilet? Do you have support or ways to get up off the toilet? You have the bars in the hospital. This is your first experience with [needing] any kind of supportive bars, you should have some. After [Home Health] PT came here and he looked - he said how are you doing getting up and down from the toilet? I was using the heater and the vanity to get up. He said we need a bar right here....I was trying to think what kind of things are taken for granted. They assume the patient realizes this. You have never done this before. I guess it is daily routine things will change. Do you have a good chair that you can prop your leg up on? Getting in and out of your bed. Do you have enough room to swing the leg out?Just little things ...Your mobility will cut down immensely. ...They did not know my home. Teachers are guilty of this too, you explain the assignment and any questions -no - okay, well good. That does not mean they got it. It just means what you shared, they know they have to do this. Not until they get involved do they have the questions. So when there are not any questions does not mean there won't be any questions. I did not think about how am I going to get up those steps. It just hit me when I saw them [discussing how she had to climb several steps to enter her home when she arrived home from the hospital].

This patient's husband described their discharge teaching this way:

I think it was a little skimpy. I don't think they covered everything they should have

covered. Especially knee surgery. Getting around. The patient has to get out of there and get in the car, get home. And then you have to move around at home when you get here. They did not cover that.

Another patient was given the instruction to eat a bland diet. “She just stood there and said to take my meds, rest, bland diet, sign here.” She related that she didn’t know exactly what was meant by a bland low fat diet. No referral to a dietician had been made. As an employee of the system where she was hospitalized, she had more knowledge of resources than many patients. She describes what she did,

I was dreading I would have that pain again. So I called the dietitian. I said they are going to put me on a bland low fat diet and I need to know exactly what not to eat so I can make sure I follow the rules. She brought me handouts.

Many of these examples indicate that health care providers may not be assessing patient knowledge before discharge teaching and they may be assuming a greater level of health literacy than patients actually possess.

Another issue in the discharge education that patients received was about knowing who to call about complications or questions that arose. Talking to the right person and getting the right information could have a role in preventing readmission. Two patients thought they would call their primary care provider office if they had questions. Two patients hospitalized for surgery thought they should call the surgeon and felt they knew how to reach him. Other patients and families, however struggled more with the answer of who to call. Two stated they would immediately call emergency medical services. Others were less certain of who might be able to best help them with questions or complications.

The final major issue that arose is the question of who should be present for discharge teaching. With one exception, no patient or family member could remember being asked who they wanted to

have present for discharge teaching. In the one case, a diabetic educator had arranged with a family member in advance for the family member to be present during instruction about beginning insulin therapy. In all other cases, the issue of family presence during discharge teaching was not addressed. One patient, whose husband happened to be present during the discharge teaching expressed the issue in this way:

I was still in a tremendous amount of pain, [my husband] seemed to comprehend things much sharper than I did. Even though she talked to me as well. I often think, gee, those poor people that leave the hospital and someone just came and picked them up and drops them off - how much they really comprehend or remember. Which may be detrimental to their getting well later.

Another patient's family member said, "I feel another family member maybe should have been in there to help her and know what they are telling her." Given the duration of hospitalizations, having a caregiver present for discharge teaching seems like one more piece that could smooth the transition between hospital and home.

Discussion

The findings of this study suggest that problems exist in the areas of coordination of care, patient and family participation in discharge decision making, and in discharge teaching. Although some patients experienced effective coordination of care and discharge teaching, the experiences were not consistent. These deficiencies may lead to poor outcomes for patients including unmet needs, medication errors, and adverse events (Naylor, Feldman, Keating, et. al., 2009; Naylor & Solchaski, 2010; Roster, Murff, and Peterson, et al., 2005 as quoted in Naylor and Sochalski, 2010). For a smooth transition from hospital to home these areas must be addressed.

Rydeman and Tornkvist (2009) studied patient and family experiences of the transition from hospital to home in Sweden. They found that patients and families had needs for information and

arrangements in 3 principal areas. These were labeled caring issues, activities of daily living, and contacts. Caring issues included receiving information about the diagnosis and treatment and satisfactory arrangements for the actual hospital discharge, follow-up visits, appropriate referrals for home care and home medical equipment. Activities of daily living included information about how to cope with the routine at home given any limitations the patient might have, and support from home care agencies as needed for eating, resting, and hygiene. It also included the presence in the home of the necessary medical equipment to support the activities of daily living. The contacts included knowledge about who to call if there were questions about prescriptions or worsening of the patient's condition and being able to reach someone easily.

These results were consistent with the themes elicited from this study. Patients and families in this study wanted to know that their care was being planned and carried out in a comprehensive and coordinated way that respected their life situation. Patients and families also wanted better communication from their health care providers about what needed to be accomplished before discharge. Finally, patients and their families needed to consistently receive more complete information on their care at home including information on medications, diet, symptom management, how the present treatment interacted with their comorbid conditions, and who to call if they experienced problems or had questions.

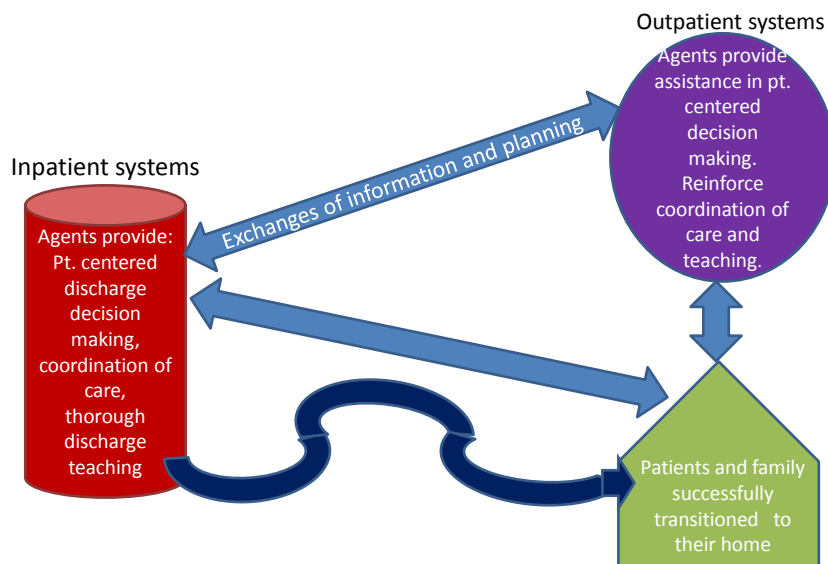
The grounded theory that emerged from this study is that a smooth transition from hospital to home is a complex process requiring clear, accurate communication and coordination of activities from all care providers involved in the patient's care, participation of the patient and family in decisions about discharge, and comprehensive discharge teaching that is patient centered. Even when these things are in place, there may be unanticipated pitfalls. Following is a model of the theory.

The model portrays the two containers or systems of the original complex adaptive systems model. The patient's route in the transition to home is not straight, because as discussed previously, the

discharge process is not as linear as health care providers assume. There must be exchanges of information with the outpatient system and with the patient and family from both the outpatient and inpatient systems for a smooth transition to occur.

This road also portrays that the patient is moving towards discharge from the first moment of hospitalization which was noted in the researcher's field notes. It seems at times that this process of moving quickly towards discharge whether the patient, family, or coordinated system are ready or not becomes the focus of care during hospitalization.

The Road Home Model



Conclusion

Quality health care demands that the discharge transition from hospital to home be improved. In this study, patients and families shared that comprehensive coordinated care individualized to their needs should include their participation and meet their needs for information and support at home. This kind of care coordination would help patients make a smoother transition from hospital to home. Despite a nationwide emphasis on improving the transition from hospital to home aimed toward decreasing re-hospitalization, the findings from this study as well as prior research indicate that this goal

is not being achieved. The question to be addressed is how to design effective strategies to meet this objective.

Chapter 5: Implications for Practice

Summary

Given the patient experiences discussed here, it is clear that patients are not receiving the support they might expect from the health care system during this difficult time. Many patients have multiple health care providers involved both during hospitalization and at discharge and it is not always clear that those health care providers are communicating in a timely way about the patient. Health care providers are not always communicating with patients and their families either. Finally, discharge teaching which should prepare patients and families for what to expect at home and how to problem solve around changes that may have occurred to the patient's condition and home treatment regimen is not consistently conducted effectively.

Patients with difficult transitions to home are at higher risk for poor outcomes. It is important to seek solutions to this problem that are patient and family centered and address the issues highlighted in this study and others about the discharge transition.

Limitations

The results of this study are limited in several ways. The sample size was small, although it was clear by the end of the interviews that patients' experiences formed a pattern of inconsistent coordination of care, communication, and discharge teaching. By the end, little new information was emerging to add to the pattern.

The study was also limited in that it included only patients cared for by one family practice at one rural community hospital. The literature would indicate, however, that the experiences of patients here are similar to those in other locations (Bauer, Fitzgerald, Haesler, & Manfrin, 2009; Naylor, et al., 2004).

Finally, the study was limited by the gender balance of the sample. During the two months of data collection, few men were hospitalized by the family practice. Two of the men hospitalized did not

meet the criteria for the study due to dementia. Two men declined to participate. The one male patient who agreed to be interviewed had already experienced a similar previous hospitalization for the same procedure and was very proactive in planning and coordinating his own discharge, which left him with a somewhat different experience than other interviewees. Thus, most of the results were based on the experiences of women. Men were included among the family/significant others interviewed, but were represented among caretakers in a smaller proportion than women.

Implications for Practice

It seems clear that as the health system has evolved into a system with ever more specialized roles, shorter hospitalizations, and more care delivered on an outpatient basis, that something has been lost in the evolution. Health care providers and hospitals are working to solve this problem with a number of programs and models for solutions and a number of endpoint goals (Jacob and Poletick, 2008). Organizations such as the AHRQ Project RED which stands for re-engineered discharge (<http://www.ahrq.gov/research/mar11/0311RA1.html>) and The Institute for Healthcare Improvement's STAAR program which stands for State Action on Avoidable Re-hospitalizations (<http://www.ihl.org/IHI/Programs/StrategicInitiatives/STateActiononAvoidableRehospitalizationsSTAAR.htm>) are only a few.

The results from this study clearly point to areas that need to be addressed in the system from which these patients were discharged. The system participates in the STAAR program and has already started to make some changes to address coordination of care and discharge teaching. Discharge planners are helping patients to schedule follow-up appointments with their primary care providers before they go home. Also, a new discharge needs assessment sheet is being piloted and will be faxed to primary care providers' offices along with discharge medication lists and final progress notes. Finally, nurses are being encouraged to use techniques to assure that patients understand the discharge

instructions they receive. These activities will help to address the issues identified in the results of this study.

Another model of addressing discharge transitions is the Transitional Care Model (Naylor, 2000). This model, first developed in 1981 for supporting low birth weight infants at discharge, now has been focused on older adults. The model is comprehensive and multidisciplinary. The APN begins working with patients during hospitalization to see that a thorough assessment of the patient's post discharge needs and support is done (Naylor, 2000). The APN then does home visits with the patient post-discharge weekly for up to one month and monthly or bimonthly for 3 months according to the needs of the patient. Telephone support is also available. The APN also attends the first post-discharge primary care visit for the patient to make sure that the primary care provider knows about the hospitalization and issues that may have arisen there. Support for the patient continues for three months. The model is multidisciplinary in that the APN works with the providers of the hospital system such as discharge planners, specialists, and hospitalists as well as the outpatient system of primary care physicians and home care agencies. In previous research on the model, it has been proven to decrease all cause readmissions through one year, improve health outcomes, increase patient satisfaction, and reduce health care costs (Naylor and Solchaski, 2010).

The Transitional Care Model would seem to offer a way to enhance transforming exchanges between the inpatient system, the outpatient system, and the patient and family. This happens first by enhanced communication provided by the advanced practice nurse (APN) between the systems. The transforming exchanges go beyond simply improved communication. The APN also has the opportunity to share with each system a more complete view of the patient and family through her assessment and home visits. This more complete picture of the patient and family context may change the patient's care beyond the current hospitalization and discharge. Finally, the change fits into a complex adaptive system model because the APN is accompanying the patient on a journey. Each patient and family

system may encounter different curves and rough places in the road on their journey home. The APN will need to help agents in all three systems (inpatient, outpatient, and patient\family) find adaptive solutions to the problems that arise.

Future directions illuminated by this study include testing of the Transitional Care Model in a primary care practice and evaluation of the outcomes. Other changes currently in progress in the hospital system will also need to be evaluated for their success in smoothing the discharge transition. It is imperative that solutions to the problems of transitional care be found to ensure improved health outcomes for patients.

References

- AHRQ. (2011). Re-engineered discharge project dramatically reduces return trips to the hospital. *Research Activities*, March 2011. Retrieved March 27, 2011 from <http://www.ahrq.gov/research/mar11/0311RA1.htm>
- Batalden, P. B., & Foster, T. C. (2004). When any change program will do...A report from the field. *ACGME Bulletin*, 3-5.
- Bauer, M., Fitzgerald, L., Haesler, E., & Manfrin, M. (2009). Hospital discharge planning for frail older people and their family. Are we delivering best practice? A review of the evidence. *Journal of Clinical Nursing*, 18, 2539-2546.
- Bixby, M. B., Konick-McMahon, J., & McKenna, C. G. (2000). Applying the Transitional Care Model to Elderly Patients with Heart Failure. *The Journal of Cardiovascular Nursing*, 14, 53-63.
- Bull, M. J., Hansen, H. E., & Gross, C. R. (2000). Predictors of elder and family caregiver satisfaction with discharge planning. *Journal of Cardiovascular Nursing*, 14, 76-87.
- Burney, M., Purden, M., & McVey, L. (2002). Patient satisfaction and nurses' perception of quality in an inpatient cardiology population. *Journal of Nursing Care Quality*, 16, 56-67.
- Foust, J. B., Naylor, M. D., Boling, P. A., & Cappuzzo, K. A. (2005). Opportunities for improving post-hospital home medication management among older adults. *Home Health Care Services Quarterly*, 24, 101-122.
- Greenwald, J. L., Denham, C. R., & Jack, B. W. (2007). The hospital discharge: A review of a high risk care transition with highlights of a reengineered discharge process. *Journal of Patient Safety*, 3(2), 97-106.
- Hamner, J. B. (2005). State of the science: Posthospitalization nursing interventions in congestive heart failure. *Advances in Nursing Science*, 28(2), 175-190.

- Hesse-Biber, S. N. & Leavy, P. (2006). *The practice of qualitative research*. Thousand Oaks, CA: Sage
- Howie, J. N., & Erickson, M. (2002). Acute care nurse practitioners: Creating and implementing a model of care for an inpatient general medical service. *American Journal of Critical Care*, 11(5), 448-458.
- Hutchinson, S. (1986). Grounded theory: The method. In P. L. Munhall & C. J. Oiler (Eds). *Nursing research: A qualitative perspective* (pp. 111-130). Norwalk, CT: Appleton-Century-Crofts.
- Institute for Healthcare Improvement. (n. d.) State action on avoidable rehospitalizations. Retrieved March 27, 2011 from <http://www.ihi.org/IHI/Programs/StrategicInitiatives/STateActiononAvoidableRehospitalizationsST AAR.htm?TabId=0>
- Jacob, L. & Poletick, E. B. (2008). Systematic review: Predictors of successful transition to community based care for adults with chronic care needs. *Care Management Journals*, 9, 154-165.
- Jencks, S. F., Williams, M. V., & Coleman, E. A. (2009). Rehospitalizations among patients in the Medicare fee-for-service program. *The New England Journal of Medicine*, 360, 1418-1428.
- Kripalani, S., LeFevre, F., Phillips, C. O., Williams, M. V., Basaviah, P., & Baker, D. W. (2007). Deficits in communication and information transfer between hospital-based and primary care physicians: Implications for patient safety and continuity of care. *JAMA: Journal of the American Medical Association*, 297(8), 831-841.
- Makaryus, A. N. & Friedman, E. A. (2005). Patients understanding of their treatment plans and diagnosis at discharge. *Mayo Clinic Proceedings*, 80, 991-994.
- Naylor, M. D. (2000). A decade of transitional care research with vulnerable elders. *The Journal of Cardiovascular Nursing*, 14, 1-14.
- Naylor, M. D., Brooten, D. A., Campbell, R. L., Maislin, G., McCauley, K. M., & Schwartz, J. S. (2004). Transitional care of older adults hospitalized with heart failure: A randomized, controlled trial

- [corrected] [published erratum appears in J AM GERIATR SOC 2004 jul;52(7):1228]. *Journal of the American Geriatrics Society*, 52(5), 675-684.
- Naylor, M. D., Feldman, P. H., Keating, S., Koren, M. J., Kurtzman, E. T., Maccoy, M. C., & Krakauer, R. (2009). Translating research into practice: Transitional care for older adults. *Journal of Evaluation in Clinical Practice*, 15, 1164-1170.
- Naylor, M. D. & Solchaski, J.A. (2010). Scaling up: Bringing the Transitional Care Model into the mainstream. *The Commonwealth Fund*, November 2010. Retrieved from <http://www.commonwealthfund.org/Content/Publications/Issue-Briefs/2010/Nov/Scaling-Up-Transitional-Care.aspx>
- Olson, E. E., & Eoyang, G. H. (2001). An emerging paradigm of organization change. In E. E. Olson, & G. H. Eoyang (Eds.), *Facilitating organization change: Lessons from complexity science* (First ed., pp. 1-24). San Francisco: Jossey-Bass/Pfieffer.
- Rydeman, I. and Tornkvist, L. (2009). Getting prepared for life at home in the discharge process from the perspective of the older persons and their relatives. *International Journal of Older People Nursing*, 5, 254-264.
- Stommel, M. & Wills, C. E. (2004). *Clinical research: Concepts and principles for advanced practice nurses*. Philadelphia, PA: Lippincott, Williams, & Wilkins.
- van Servellen, G., Fongwa, M., & Mockus D'Errico, E. (2006). Continuity of care and quality care outcomes for people experiencing chronic conditions: A literature review. *Nursing & Health Sciences*, 8(3), 185-195.
- Wenger, N. S., & Young, R. T. (2007). Quality indicators for continuity and coordination of care in vulnerable elders. *Journal of the American Geriatrics Society*, 55, S285-92.
- Williams, B. (2007). Supporting self-care of patients following generally abdominal surgery. *Journal of Clinical Nursing*, 17, 584-592.

Appendices

Appendix A

Patient ID	Pt Age	Caregiver relationship	Discharge diagnosis	Adm Date 2011	Discharge Date 2011	Length of hosp	Discharge Disposition Home, ECF, Home Care	Re-adm before interview	Comments
1	90	Son-lives in same area	Right hip fx. S/P open treatment of intertrochanteric femur fracture with cephalomedullary nail. Also has a-fib, HTN, CHF, hypothyroidism, acute blood loss anemia, rheumatoid arthritis, nocturnal hypoxia, Hx DVT	1/3	1/7	4d	ECF 17 meds, 16 chronic, 1 acute	N	Care by substitute surgeon with family practice to follow and discharge.
2	71	Daughter-lives in same area as patient	Incisional hernia repair CAD, DM, HTN, Epilepsy, CVD	1/13	1/17	4d	Home with home care 17 meds, 16 chronic, 1 acute	N	Care by surgeon. No official consult.
3	54	Boyfriend-live together part time	Chest pain syndrome Syncope hypokalemia	1/3	1/4	1d	To boyfriend's home 24 meds 24 chronic	Y at VA in Dayton	Would have liked home health, but not eligible due to not being home bound. Lives part time at boyfriend's home so she isn't alone without a phone.

Patient ID	Pt Age	Caregiver relationship	Discharge diagnosis	Adm Date 2011	DC date 2011	Length of hosp	Discharge Disposition Home, ECF, Home Care	Re-adm before interview	Comments
4	76	Son-lives with patient, but gone all day (not interviewed)	UTI with urosepsis Pneumonia CHF Weakness Hypocalcemia Dehydration	1/7	1/10	3d	Home with home care 18 meds 17 chronic, 1 acute	N	Home with O2
5	90	Daughter-lives with pt.	Anemia, Uncontrolled DM. CAD, CHF.	1/17	1/20	3d	Home with home care 12 meds 12 chronic	N	Insulin added to regimen.
6	64	Husband	Left knee replacement. Acute blood loss anemia, hypoxemia, migraine headache, GERD, hypercholesterolemia, HTN, severe nausea and vomiting from pain medication, hx of DVT, PE	1/25	1/29	4d	Home with home care 8meds, 6 chronic, 2 acute	N	Care by surgeon with family practice. No official consult.
7	77	Niece-lives in same area as patient	Atrial fibrillation with rapid ventricular response. CHF	1/31	2/5	6d	ECF 10 meds 10 chronic	N	Discharged from ECF after 3 weeks. Returned home.
8	68	Wife	Total knee arthroplasty Excision sc mass L hand Excision nail plate L great toe. Mitral valve prolapse with valve replacement, 1998, PUD, hyperlipidemia, COPD	1/25	1/28	3d	ECF for one week. Then home with outpatient PT. 16 meds 5 chronic, 11 acute for levels of pain and constipation	N	Doing very well with mobility after 6d at ECF. Opted to go home at that point.

Patient ID	Pt Age	Caregiver relationship	Discharge diagnosis	Adm Date 2011	DC Date 2011	Length of hosp	Discharge Disposition Home, ECF, Home Care	Re-adm before interview	Comments
9	88	Daughter-in-law-lives in same area as patient	Right lower lobe pneumonia Asthma	2/4	2/7	3d	Home with home care 7 meds- 5 chronic, 2 acute	N	Home with O2
10	86	Daughter-lives in same area (not interviewed)	TIA, HTN, osteoporosis	2/19	2/21	2d	Home with home care, later declined 4 meds 4 chronic	N	Declined HH at first home visit.
11	50	self	Acute pancreatitis Cholecystitis Hypertension	2/16	2/20	4d	Home 5 meds 5 chronic		Patient is RN Returned same day surgery-cholecystectomy 2/24
12	81	Sister-lives in an apartment in same complex as patient	bronchitis	2/21	2/22	1d	Home 8 meds 7 chronic, 1 acute	N	Admitted 2/15 for CHF. Brief hospitalization. Discussion at second hospitalization about whether second hospitalization was actually CHF or bronchitis. New diagnosis or bounce back for previous diagnosis.

Appendix B: Interview guide

- What symptoms caused you to seek care (go to the doctor, or emergency room, or call 911-will specify question to patient's mode of entry into the system)?”
- Did you have this problem before?
- How do you feel now that you are home?
- Tell me about your hospitalization.
- Tell me about your hospital discharge.
 - How did you and your doctor discuss your discharge?
 - Did you feel ready to go home?
 - What instructions were you given for your care of home?
 - What medications are you on now?
 - If you have any questions, who would you call?
- How could the experience have been made better?
- What were the highs and lows of the experience?
- What would the discharge process look like if you designed it?